

CLAIMS

[1] A luneberg lens comprising:

a lens which is configured by combining lens parts of spherical core and spherical shell-like resin foams, wherein

the lens is sealed by a synthetic resin film which is formed along a surface of the lens and in which a thickness is 100 μ m or less and of which own relative dielectric constant is higher than a relative dielectric constant of the outermost layer of the lens.

[2] The luneberg lens as set forth in claim 1, wherein the synthetic resin film is a shrink film.

[3] An antenna apparatus comprising:

a hemispherical luneberg lens,

a reflecting plate which is attached to a two-divided cross section of a sphere of this lens,

a primary feed which is placed at a focal point portion of the lens, and

a holding unit of this primary feed, wherein

the hemispherical luneberg lens is configured by the luneberg lens set forth in claim 1 or 2.

[4] An antenna apparatus comprising:

a luneberg lens of which surface is sealed by a cover made by synthetic resin,

a primary feed which is placed at a focal point portion

of the lens, and

a holding unit of the primary feed, wherein
the hemispherical luneberg lens is configured by the
luneberg lens as set forth in claim 1 or 2, and
the cover has a thickness of 2mm or less.